What is claimed is:

1. A process for making an anisotropic layer of cross-linked liquid crystalline monomers in contact with an orientating layer on a single substrate, which comprises applying an orientating layer onto a single substrate, then applying a layer of a non-cross-linked liquid crystalline monomer, and subsequently cross-linking the monomer.

2. The process according to claim 1 further comprising subsequently applying a second orientating layer to the liquid crystalline monomer layer.

3. The process according to claim 2 further comprising applying a second layer of non-cross-linked liquid crystalline monomer to the second orientating layer, and subsequently cross-linking the second monomer.

4. A component having a layer structure, which comprises a substrate, a first orientating layer, a liquid crystalline monomer layer, and a second orientating layer, the first orientating layer and the second orientating layer being located on opposite sides of the liquid crystalline monomer layer, with at least one of the orientating layers include a photo-orientating polymer network.

5. The optical component according to claim 4, wherein at least one of the orientating layers has a locally varying orientation pattern.

6. The optical component according to claim 4 further comprising an additional anisotropic layer of oriented cross-linked liquid crystal monomers located adjacent the second orientating layer.

7. The optical component according to claim 4, wherein the second orientating layer has a surface orientation structure produced by rubbing or oblique sputtering.

8. The optical component according to claim 4, wherein an isotropic de-coupling layer is provided between the liquid crystalline monomer layer and the second orientation layer.

9. The optical component of claim 4, wherein one or more of the first orientating layer, the second orientating layer, and the cross-linked liquid crystal monomer layer cover only a portion of the substrate.

10. The optical component according to claim 6, wherein one of the cross-linked liquid crystal monomer layers is an optical retarder.

11. The optical component according to claim 10 further comprising a plurality of liquid crystal monomer layers functioning as optical retarders.

12. The optical component according to claim 10, wherein one of the cross-linked liquid crystalline monomer layer is constructed as a twisted optical retarder, and incorporates a cholesteric liquid crystal material.

13. The optical component according to claim 4, wherein the liquid crystalline monomer layer comprises a highly twisted cholesteric liquid crystal material so as to act as an optical filter or circular polarizer in certain light wavelength ranges.

14. The optical component according to claim 6, wherein one or more of the liquid crystalline monomers layers comprises a highly twisted cholesteric liquid crystal material so as to act as an optical filter or circular polarizer in predetermined light wavelength ranges.

15. The optical component according to claim 4 further comprising an absorptive color filter layer.

16. The optical component of claim 4, wherein the liquid crystalline monomer layer is ferroelectric.

17. The optical component according to claim 4, wherein the liquid crystalline monomer layer has non-linear optical activity.

18. The optical component according to claim 4 further comprising a second cross-linked liquid crystal monomer layer and a second photo-orientating polymer network layer wherein the uppermost monomer layer is constructed as an orientating layer.

19. The optical component according to claim 4, wherein the liquid crystalline monomer layer contains dichroic dye molecules.

20. The optical component according to claim 4, wherein the liquid crystalline monomer layer consists essentially of a cross-linked monomer or a monomer mixture which in the monomeric state is liquid crystalline between about 15°C and about 80°C, at least during the processing period.

21. The optical component according to claim 20, wherein the temperature range is from about 15°C to about 50°C.